AN ECONOMIC ASSESSMENT OF THE PROHIBITION ON EXCLUSIVE CONTRACTS FOR SATELLITE-DELIVERED, CABLE-AFFILIATED NETWORKS

DECLARATION OF DR. MARK ISRAEL

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I. INTRODUCTION

A. QUALIFICATIONS

1. I am Mark Israel. I am a Senior Vice President and Managing Director in the Washington, DC office of Compass Lexecon, LLC, an economic consulting firm. From August 2000-June 2006, I served as a full-time member of the faculty at Kellogg School of Management, Northwestern University. I received my Ph.D. in economics from Stanford University in 2001.

2. At Kellogg and Stanford, I taught graduate level courses in economics and business. I specialize in the economics of industrial organization, which is the study of individual markets and includes the study of antitrust and regulatory issues. My research has been published in leading economics journals including the American Economic Review, the Rand Journal of Economics, and Review of Industrial Organization.

3. I have worked in consulting at Compass Lexecon since 2006, applying theoretical and empirical methods to the analysis of mergers and related antitrust issues, monopolization cases, intellectual property disputes, class certification, and damages calculations. I have served as an economic expert in a range of industries including cable television, wireless communications, airlines, consumer products, financial markets, pharmaceuticals, publishing, and various high technology industries. In particular with respect to the issues presented in this proceeding, I (together with Michael Katz) submitted multiple reports to the Commission as part of its 2010 review of the Comcast-NBCU merger, and I explicitly reference insights gained from that experience in this Declaration.

4. A copy of my Curriculum Vitae is attached as Exhibit 1.

B. Overview and Summary of Conclusions

5. The Federal Communications Commission ("Commission") has issued a Notice of Proposed Rulemaking ("NPRM") requesting comments on "whether to retain, sunset, or relax … the prohibition on exclusive contracts involving satellite-delivered, cable-affiliated programming."[1] I have been asked by the National Cable and Telecommunications Association ("NCTA") to analyze, from an economic perspective:

- the justifications for the ban on exclusive distribution of cable-affiliated programming;
- whether those justifications, even if valid at the time Congress adopted the ban, remain valid today; and
- the conclusions one can draw from the economic models used by the Commission staff and third-party economists to analyze incentives for vertically integrated MVPDs/programmers to distribute their affiliated networks on an exclusive basis.

6. I build my analysis around two important aspects of the current proceedings. **First**, given the question posed in the NPRM, the relevant policy debate is not about whether, *as a general matter*, cable-affiliated programmers have an incentive to or should be allowed to enter *exclusive contracts* for the distribution of their programming. Under the current program access rules, non-cable-affiliated programmers are allowed to enter into exclusive distribution contracts, and cable MVPDs are allowed to sign exclusive contracts for third-party (non-cable-affiliated) content. Rather, the policy question at issue is whether *cable-affiliated programming networks*, in particular, should continue to be *required to "deal"*

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1 *Revision of the Commission's Program Access Rules*, Notice of Proposed Rulemaking, 27 FCC Rcd. 3413 ¶ 1 (2012) ("*NPRM*").

with unaffiliated MVPDs, *i.e.*, whether they should be required to license their programming to unaffiliated MVPDs under all circumstances.

7. **Second**, as a matter of economics, in order to justify the continuation of a requirement that cable-affiliated networks must license their programming to unaffiliated MVPDs in all cases, it is not sufficient to argue that a refusal by such programming networks to deal with unaffiliated MVPDs could be anti-competitive in certain cases. Rather, to justify a requirement to deal in all circumstances, the Commission would have to be confident that refusals by cable-affiliated networks to deal with unaffiliated MVPDs would be anti-competitive in all or nearly all settings (without offsetting pro-competitive justifications and benefits), so that the costs associated with a detailed evaluation of specific cases would not be warranted.

8. Using this framework for analysis, I reach the following main conclusion: *Even if a per se ban on the exclusive distribution of cable-affiliated networks was justified at the time Congress adopted it, such a blanket ban is no longer appropriate*. In today's highly competitive MVPD environment, a cable-affiliated network's refusal to license its programming to unaffiliated MVPDs may be a useful part of the competitive process, as a cable-affiliated network can develop new and improved programming to enhance the quality of its affiliated MVPD, thus benefitting the consumers of that MVPD and likely eliciting similarly pro-consumer competitive reactions from rival MVPDs. In this environment, evaluation of any particular exclusive contract should be based on the merits of the arrangement in question, using the Commission's established procedure for evaluating

specific exclusive arrangements.[2] When implementing this procedure, the Commission should take regulatory actions that restrict the choices of market participants *only* in those cases where there is a convincing demonstration that a particular exclusive arrangement clearly reduces total social welfare.[3]

9. This conclusion is based on the following specific points, each explained in more detail in the subsequent sections of this Declaration:

- *Per se* prohibitions of particular business practices are justifiable on economic efficiency grounds only in very limited circumstances—namely, when the practice is almost certain to harm competition and has no pro-competitive business justification. Outside of these limited circumstances, sound regulatory policy should seek to avoid restricting the choices open to firms in competitive marketplaces where possible, by starting from the presumption that, in the absence of clear and compelling evidence to the contrary, the actions of competitive firms (while self-interested) also promote social welfare and efficiency. Even if a business practice appears to be anti-competitive, regulation should proceed carefully, and should generally be limited in

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2 The Communications Act of 1934 (as amended) and Commission rules currently allow MVPDs to bring complaints against exclusive contracts between cable operators and programmers on the grounds that such contracts constitute "unfair methods of competition or unfair or deceptive acts or practices, the purpose or effect of which is to hinder significantly or to prevent any multichannel video programming distributor from providing satellite cable programming or satellite broadcast programming to subscribers or consumers." 47 U.S.C. §548(b). The Commission has addressed these complaints on a case-by-case basis. *See NPRM* § III.A.4.a.i.a.

3 A total welfare standard considers the combined change in firms' economic profits (producer surplus) and consumer welfare (consumer surplus) in assessing policies. Economists generally consider it as the preferred standard, as it avoids asymmetric treatment of different individuals depending on whether they are producers or consumers in a given transaction. (For a discussion, see Ken Heyer, *Welfare Standards and Merger Analysis: Why Not the Best?*, 2 Competition Policy Int'l 29-54 (2006).) The same type of analysis presented here would apply if one adopted a consumer welfare standard, but only the effects of the practice on consumers would be included in the analysis.

its scope and duration, because of the potential for unanticipated consequences and because of uncertainty in judgments about the competitive effects of any particular business practice. (See Section II.A.)

- Even if a *per se* ban on the exclusive distribution of cable-affiliated networks was justified at the time Congress adopted it, the marketplace is starkly different today than it was nearly 20 years ago when the ban was enacted, and these changes have undermined the rationale for the ban. Multiple MVPDs have entered the marketplace (perhaps aided in this effort by the program access rules' temporary guarantee of access to the same programming that cable operators offered). These MVPDs—including DBS and telco providers—are now mature competitors with a large base of subscribers and well-established programming lineups, and, as such, could counter the hypothetical loss of particular cable-affiliated networks with their own competitive strategies. Hence, a *per se* ban on exclusive distribution of cable-affiliated programming is no longer needed to foster competitive entry. (See Section II.B.)

- Just as any firm's refusal to license its products to its competitors is not necessarily anti-competitive, but rather may be an important part of the competitive process, a cable-affiliated network's refusal to license its programming to other MVPDs may be central to a pro-competitive and pro-consumer strategy. A vertically integrated programming network that enters into an exclusive arrangement with its affiliated MVPD can develop new content or improve the quality of its content as part of a strategy to differentiate the offering of its affiliated MVPD from that of the affiliated MVPD's competitors. In particular, allowing a cable-affiliated network to refuse to license its content to unaffiliated MVPDs, and thus to appropriate the full benefits of its investments in content, including the benefits that accrue to the affiliated MVPD via its improved offering, can:[4]

  - increase incentives to invest in high-quality content, either by developing new content or by improving the quality of existing content; and
  - induce rival MVPDs to react pro-competitively by developing their own content or by working with existing networks to improve the quality of their content.

(See Section III.A.)

- It is incorrect to conclude that it is uniquely pernicious for vertically integrated programming networks to refuse to deal with unaffiliated MVPDs. To the contrary, in many cases, vertical integration may enable MVPDs and programmers to take full advantage of the incentives to invest in quality created by exclusive arrangements, because vertically integrated firms can overcome the problems of "hold-up" and "transaction costs" that hinder many arm's-length arrangements. (See Sections III.B and III.C.)

- The purported demonstrations by Commission staff and third-party economists that, under specific circumstances, a cable MVPD and its affiliated networks may have incentives to enter exclusive distribution arrangements do not justify a *per se* ban on

[4] Given that there are gross profit margins in the MVPD business that content providers cannot fully appropriate, vertically integrated networks and their affiliated MVPDs can increase combined profits by refusing to license content to unaffiliated MVPDs, thus improving the affiliated MVPD's offerings and increasing its subscriber share in the MVPD marketplace. This expectation of greater profits increases the incentives for a vertically integrated network to invest in content.

such exclusive distribution arrangements. The models used by Commission staff and third-party economists are insufficient for several reasons:

- The models can, at most, establish the existence of incentives to engage in exclusive distribution. They cannot answer the policy-relevant question of whether the ultimate effect of exclusive arrangements is to increase social welfare (by increasing the quality of the set of options available to consumers) or to decrease social welfare (by limiting consumer choice).
- The models are incomplete because they do not consider the dynamics of upstream and downstream competition—most importantly, whether and how other MVPDs will react to exclusivity arrangements between an MVPD and its affiliated networks.
- Even if one accepted the validity of the models, the answers that they produce depend on the values of *many* case-specific parameters. And the appropriate values for those parameters are not easily ascertained, but rather require case-specific empirical and theoretical analysis. Hence, if anything, the use of these models undercuts the case for a blanket prohibition on exclusive contracts.
- Implementing the models is necessarily complex and subject to error. In many cases, estimates of key parameters cannot practically be made and so the analysis must proceed based on assumptions about the values of these key parameters. The outcomes of the model, however, are sensitive to the specific assumptions made. These shortcomings make it difficult to apply the

model in any particular instance and can lead to arbitrary policy recommendations.

(See Section IV.)

II. GIVEN THE CURRENT STATE OF THE MVPD MARKETPLACE, A *PER SE* BAN ON EXCLUSIVE DISTRIBUTION OF CABLE-AFFILIATED NETWORKS IS NO LONGER JUSTIFIED

A. APPROPRIATE ECONOMIC STANDARDS FOR REGULATION

10. Unfettered competition is a powerful (if sometimes imperfect) force for ensuring economic efficiency and maximizing social welfare. Hence, it is generally accepted among economists that sound regulatory policy should start from the presumption that the actions of competitive firms, while self-interested, also promote social welfare and efficiency.[5] Although this presumption may be challenged with regard to specific business practices, the public policy goal of economic efficiency is generally best served by evaluating those specific business practices on their case-specific economic merits, taking into account the full context of the specific situation. Even if a particular business practice appears to be anti-competitive, regulation should proceed carefully—and generally should be limited in its scope and duration—because of the potential for unanticipated consequences and because of uncertainty in judgments about the competitive effects of any particular business practice.[6]

11. *Per se* prohibitions of particular business practices are justifiable on economic efficiency grounds only in very limited circumstances—namely, when the practice is almost

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[5] For a discussion of regulation as a response to the failure of competition to achieve an efficient outcome when markets are imperfect, see Daniel F. Spulber, *Regulation and Markets*, Ch. 1 (MIT Press 1989).

[6] For a general discussion of the difficulty of designing regulations when information is limited, see Alfred E. Kahn, *Applications of Economics to an Imperfect World*, 69 Am. Econ. Rev. 1-13 (No. 2, 1979).

certain to harm competition and has no pro-competitive business justification.[7] Thus, for example, cartelization or price fixing is *per se* illegal under U.S. law because successful attempts to restrict output and raise price by concerted action harm competition and consumers, and there is generally no credible economic efficiency derived from the practice.[8] The nearly certain adverse impact on consumers and on total social welfare makes a case-by-case evaluation of the merits of price fixing a waste of resources.

12. Similarly, as a matter of economics, justification of a *per se* prohibition on exclusive contracts involving satellite-delivered, cable-affiliated programming would require one to show that such contracts would almost certainly harm competition without giving rise to off-setting economic efficiencies and thus that such contracts almost certainly reduce social welfare. As I demonstrate below, no such showing can be made.

B. Changed Marketplace Conditions Have Eliminated Any Economic Justification for a Blanket Ban on Exclusive Distribution of Cable-Affiliated Networks

13. Applying the appropriate economic standards for regulation developed above, twenty years ago—when the ability of cable MVPDs to quash nascent competition may have been a valid concern—circumstances may have justified a *per se* ban on exclusive contracts involving satellite-delivered, cable-affiliated programming. At that time, 53 percent of all national programming networks were vertically integrated and cable operators served 95 percent of all MVPD subscribers.[9] In such an environment, under the theory that new entrants might have been unable to compete if they could not access the same programming

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7 For a discussion, see Frank H. Easterbrook, *The Limits of Antitrust*, 63 Tex. L. Rev. 1-40 (1984).

8 *See id.* at 18.

9 *NPRM* app. A & app. B, Table 1.

as the cable operators, who were the only established MVPDs of any consequence, an exclusivity ban directed only at cable MVPDs and their affiliated programmers may have been a sensible policy to protect and foster nascent competition. In particular, the specter of lack of access to programming might have reduced the incentives of a potential or new competitor to sink the costs required to enter MVPD markets or further strengthen their presence in those markets.

14. This rationale for the original adoption of the exclusivity ban is consistent with the usual antitrust standard for evaluating anti-competitive distribution arrangements. Such arrangements may be anti-competitive if an upstream firm withholds an "essential facility" from downstream firms—meaning it withholds inputs without which the downstream firms cannot compete effectively.[10] When MVPD competitors to cable companies were just entering the marketplace, it may have been very difficult if not impossible to compete without access to all the programming affiliated with the established cable companies.[11] Thus, access to all of this programming may properly have been considered an essential facility.

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[10] In the Terminal Railroad case, for example, railroads that jointly owned all of the bridges crossing the Mississippi River near St. Louis were required to provide access to competing railroads because the bridges together were judged to be an essential facility. *See United States v. Terminal R.R. Ass'n of St. Louis*, 224 U.S. 383 (1912). There are very few such examples, however, where courts have determined that an input was an essential facility.

[11] Even at the time, not all content might have been crucial for an MVPD's ability to enter and expand. For example, DBS providers were not permitted to provide "local-into-local" retransmission of local broadcast stations in their local markets, until the Satellite Home Viewer Improvement Act of 1999 ("SHVIA") was passed. Nevertheless, a study cited by the Commission in 2001 found that, just prior to introduction of local-into-local service in 13 DMAs, DirecTV and EchoStar (DISH Network) averaged 4,002 new subscribers per month per DMA (increasing to 5,706 after introduction of local-into-local services). *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Seventh Annual Report, 16 FCC Rcd. 6005 ¶ 69 (2001). In June 1999, still prior to passage of SHVIA, DBS already commanded 12.5% of the national MVPD marketplace. *See id.* app. C, Table C-1. This indicates that DBS firms were able to enter and expand significantly, even before they could provide local-into-local service.

15. Today the situation is entirely different. **First**, the MVPD marketplace today is robustly competitive. Non-cable MVPDs, which were miniscule or simply did not exist when the ban was enacted, are now among the largest MVPDs in the country. DirecTV and DISH Network are the 2nd and 3rd largest MVPDs in the U.S., with approximately 20 million and 14 million video subscribers, respectively; Verizon and AT&T are the 6th and 8th largest MVPDs in the U.S., with about 4.4 million and 4 million video subscribers respectively.[12] Because of the entry and growth of these competitors, consumers today generally have multiple options for MVPD services. As of the end of 2010, in all local markets in which there is a cable operator (comprising 98 percent of U.S. households), consumers have access to at least three MVPDs: the cable operator and two DBS providers.[13] And 43.6 million households—over 40 percent of U.S. households—can choose among at least four MVPDs (the local cable operator, the two DBS providers, a telco MVPD, and in some cases a "cable overbuilder" such as RCN or WOW!).[14]

16. **Second**, despite the common (and loose) use of the phrase "must-have network" in policy discussions, I know of no economic basis today to say that cable-affiliated networks are generally "must-have" essential facilities without which rival MVPDs cannot compete effectively. This does not mean that no subscribers would switch MVPDs if particular MVPDs no longer carried particular programming: Some subscribers surely would switch, but that is not the relevant standard. Rather, as described above, the relevant standard is whether the cable-affiliated network is an essential facility without which other MVPDs

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12 NCTA, *Top 25 Multichannel Video Programming Distributors as of Mar. 2012*, *available at* http://www.ncta.com/Stats/TopMSOs.aspx, (last visited Sept. 4, 2012).

13 *See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming*, Fourteenth Report, 27 FCC Rcd. 8610 ¶ 40 & Table 2 (2012).

14 *See id.*

cannot compete effectively for new subscribers. I have seen no evidence that cable-affiliated networks generally meet this standard. To the contrary, among the national cable-affiliated networks that are currently implicated by the ban on exclusive distribution are NBCU's G4, Chiller, and Cloo; Cablevision's Fuse and Sundance; and Discovery's Velocity and Destination America.[15] Also implicated is any local cable-affiliated network focused on local news content. No one reasonably can claim that any of these networks are essential facilities without which unaffiliated MVPDs cannot compete.[16] And although many commenters (and the Commission) have referred to regional sports networks (RSNs) as "must-have,"[17] the situation surrounding any particular RSN is inherently localized—depending on the content available on the RSN, the preferences of local viewers, alternative sources of content, *etc*.—and thus the example of RSNs highlights the need for case-by-case analysis, rather than the overbroad implementation of a blanket ban on exclusive distribution of cable-affiliated programming.[18]

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15 *See NPRM* app. B, Table 2.

16 Notably, in his Declaration in the recent Comcast-NBCU merger, Professor William Rogerson used five percent as his estimate of the percentage of subscribers an MVPD might lose if it did not have a particular network. *See* William P. Rogerson, *Economic Analysis of the Competitive Harms of the Proposed Comcast-NBCU Transaction*, MB Docket No. 10-56, at 31 (June 21, 2010). An accurate estimate of this parameter (which is critical to Professor Rogerson's model) would actually require case-specific analysis. However, if subscriber losses were in the neighborhood of five percent, MVPDs would certainly notice—and react competitively to—such losses, but I see no basis to conclude that a five percent subscriber loss would even approach a level that would render the MVPD unable to compete effectively.

17 *See NPRM* ¶ 28.

18 Indeed, I understand that there are many instances in which MVPDs have chosen not to carry particular RSNs. For example, I understand that DISH Network has never carried the YES Network (a New York RSN), that Cablevision went a year without carrying the YES Network, and that during some periods of time, DISH Network has dropped all of the Fox RSNs and Comcast SportsNet California. As a matter of economics, the ability to forego such networks and yet remain viable indicates that they are not "essential facilities."

17. Moreover, if the loss of a particular cable-affiliated network did significantly decrease the quality of a non-cable MVPD's service, that MVPD can and surely would adopt competitive counter-strategies. Most simply, the non-cable MVPD could cut prices (passing through some or all of its reduction in programming costs due to loss of a particular network).[19] In addition, non-cable MVPDs have the resources (including established customer bases) to develop and distribute exclusive programming of their own or can collaborate with content providers to create such programming. These MVPD providers also have other ways to differentiate their offerings and compete, such as by improving DVR technologies, offering different slates of VOD or online programming, developing different kinds of video and multi-product bundles, or offering viewing capabilities on more devices. For example, DISH Network—through its ownership of Sling Media—offers a proprietary "Sling Adapter," which enables its subscribers to watch all the live TV channels to which they subscribe and all their DVR recordings remotely via an Internet connection.[20] If improved offerings from other MVPDs encourage DISH Network to offer more such

[19] For example, during the dispute between Allbritton Communications and DISH Network—which resulted in the ABC affiliates in four DMAs (Washington, Birmingham, Harrisburg, and Tulsa) being unavailable to DISH subscribers from May 31 to June 4, 2003—DISH Network offered to refund the $5-$6 monthly fee that its subscribers paid for local channels. *See* John Maynard, *DISH TV Denied WJLA in Contract Dispute*, Wash. Post, June 2, 2003. Similarly, during the dispute between Viacom and DISH Network in March, 2004—in which Viacom withdrew from DISH Network the signals of 15 CBS owned-and-operated stations (along with other Viacom cable networks) in most of the largest DMAs in the country—DISH announced that it would offer rebates to those subscribers who lost access to programming equal to $1 for the cable networks and $1 for the CBS programming. *See* R. Thomas Umstead, *Kicking Dish in the Pants: MSOs Exploit EchoStar's Brief Loss of SpongeBob and Pals*, Multichannel News, Mar. 14, 2004, *available at* http://www.multichannel.com/article/59130-Kicking_Dish_In_The_Pants.php (last visited Sept. 4, 2012).

[20] *See* DISH Network, *TV Everywhere Technology*, http://www.dish.com/technology/tv-everywhere/#how-sling-adapter-works (last visited Sept. 4, 2012) (discussing how the Sling Adapter works).

services, or to offer them as part of lower-priced packages, this will benefit consumers, particularly those who place high value on such services.

18. To be clear, I am not saying that exclusivity arrangements can never harm competition, but rather that, given the presence of robust competition from mature companies fully capable of responding to the business strategies of cable MVPDs, there should be no presumption that a ban on exclusive distribution of cable-affiliated programming is necessary to protect and foster competition. Rather, to the extent that one concludes that regulation remains necessary, a determination of whether or not exclusive arrangements are harmful should be made on a case-by-case basis. And in making those case-by-case determinations, anti-competitive effects cannot be assumed to exist or, if they do exist, they cannot be assumed to dominate pro-competitive effects. Rather, exclusive arrangements reached by private parties should be struck down by regulation only when there is clear and compelling evidence that the arrangements significantly impair competition and that there are not offsetting competitive benefits from the arrangement.

19. Finally, I note that by choosing the allowable set of distribution arrangements only for cable-affiliated networks—in particular, disallowing exclusive distribution of cable-affiliated networks, even if it is economically efficient—regulation may raise costs for vertically integrated cable MVPDs *relative to* other MVPDs. Favoring one competitor over another in this way likely leads to a shift in subscribership toward non-cable MVPDs that is driven by the regulation and not by market forces and thus softens competition. It is certainly not surprising that non-cable MVPDs would like restrictions to be applied to their competitors. However, absent a clear and convincing showing that such regulation is

required to prevent anti-competitive outcomes, softening the competitive threat posed by particular firms is not good economic policy.

III. IMPOSING A REQUIREMENT TO DEAL ON VERTICALLY INTEGRATED CABLE NETWORKS HARMS INCENTIVES TO INVEST AND DULLS COMPETITION

20. As explained above, the relevant policy question for this NPRM is not whether exclusives in general are either desirable or likely to be adopted in the MVPD industry, but rather whether there should be an *affirmative requirement to deal (i.e., license content to unaffiliated MVPDs) imposed on vertically integrated cable networks*. As with *per se* rules in general, such a blanket requirement to deal would be good economic policy only if refusals to deal by vertically integrated cable networks were anti-competitive under nearly all circumstances, without offsetting pro-competitive benefits. In this section, I demonstrate that, far from always being anti-competitive, exclusive arrangements have important pro-competitive benefits and that imposing a requirement to deal can harm investment incentives and competition to the detriment of consumers.

A. LIFTING THE REQUIREMENT TO DEAL WOULD ENHANCE INCENTIVES TO INVEST IN QUALITY PROGRAMMING AND THUS FOSTER COMPETITION

21. Although there may be specific circumstances in which a vertically integrated cable network's refusal to license its content to unaffiliated MVPDs may have anti-competitive effects, there are also circumstances in which it may ultimately benefit viewers by promoting efficient investment in new or improved content. In particular, a vertically integrated MVPD that can differentiate its offerings and increase its profits by distributing, on an exclusive basis, some of its high-quality affiliated content has greater incentives to invest in that content than it would have under a requirement that the content be shared with

its rivals in the MVPD marketplace.[21] Put differently, the increased MVPD profits that may result from exclusive distribution need not automatically indicate harms to consumers, but rather the existence of such profits may generate pro-competitive incentives to invest.[22] For instance, similar to DirecTV's introduction of new content for its exclusively-distributed NFL Sunday Ticket (such as the "Game Mix Channel," which allows users to watch up to eight live NFL games at once, and the "Red Zone" channel, which allows users to watch the major plays of all games on one channel),[23] exclusive distribution of local and regional news and sports networks could create incentives for MVPDs to invest in innovative programming and features related to that programming. Such programming and features could include, for example, production of more local and regional programming, production of more HD content, development of pre-game or post-game content or team-specific

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[21] As noted above, given that there are gross profit margins in the MVPD business that content providers cannot fully appropriate, vertically integrated networks and their affiliated MVPDs can increase combined profits by refusing to license content to unaffiliated MVPDs, thus improving the affiliated MVPD's offerings and increasing its subscriber share in the MVPD marketplace. This expectation of greater profits increases the incentives for a vertically integrated network to invest in content.

[22] As another example where the ability to earn profits generates pro-competitive activity, consider the U.S. patent system. The U.S. patent system protects the right of an inventor to exploit his invention rather than share it with others (or to license it to others at a cost if he chooses). This allows the inventor to earn profits that he otherwise might not be able to appropriate. The prospect of profiting from an invention preserves incentives to invest in innovative activities. Competitors, rather than free riding on the inventions of others, are forced to respond with their own innovative activities or to compete on other dimensions. (For a basic discussion of the role of patents in innovation incentives, see Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization* 525-39 (*4th ed.* 2005)).

[23] Press Release, DirecTV, *DIRECTV Beefs Up Its Exclusive NFL SUNDAY TICKET(TM) Package with HD, Red Zone Channel, Game Mix and More at No Additional Cost* (Aug. 2, 2010), *available at* http://dtv.client.shareholder.com/releasedetail.cfm?ReleaseID=495478 (last visited Sept. 4, 2012).

shows, development of interactive enhancements, and creation of tighter linkages between on-air and online content involving local sports teams.[24]

22. Moreover, through the usual competitive process, new or improved content distributed by one MVPD—including via exclusive programming networks—puts competitive pressure on other MVPDs to offer more value to consumers, perhaps by lowering their prices, developing or improving their own affiliated network offerings,[25] or otherwise improving the set of services they offer (*e.g.*, voice or data offerings, online content, DVR technologies, *etc.*).[26] This dynamic response whereby one company responds

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[24] For more on quality improvements motivated by exclusive distribution of RSNs and other local programming, see Cablevision Answer to Program Access Complaint, *AT&T Services, Inc. v. Madison Square Garden, L.P.*, CSR-8196-P, at 9-10 (Sept. 17, 2009) (explaining that Cablevision and MSG "were willing to risk capital and resources deploying HD production and delivery capabilities – at a time when few others in the industry were willing to do so" in order to differentiate Cablevision's offerings); Cablevision Comments, MB Docket No. 12-68, at 8 (June 22, 2012) (explaining that Cablevision's past ability to engage in exclusivity for terrestrially-delivered affiliated programming resulted in the launch of networks like News 12—which today includes "seven individual local 24-hour news channels . . . complemented by a robust online offering" – and MSG Varsity – a "multiplatform suite of services comprised of a 24/7 Emmy Award winning HD television network, a comprehensive online destination, and a groundbreaking interactive service"); and Commission statements in *RCN Telecom Servs. of N.Y., Inc. v. Cablevision Sys. Corp.*, Memorandum Opinion & Order, 14 FCC Rcd. 17093 ¶ 23 (1999) (finding that Cablevision "invested substantial resources in developing the MetroChannels as a new 'hyper-local' service tailored to the interests of specific communities and offering a wide range of original news, entertainment, and sports content").

[25] The prediction that independent MVPDs would likely react to the hypothetical loss of a cable-affiliated network by investing more in developing or improving their own programming networks is consistent with the characterization of the MVPD industry put forward elsewhere by some of those making comments in these proceedings. For example, Professor William Rogerson has previously argued that programming networks are often substitutes, in the sense that a particular network becomes more valuable to an MVPD when that MVPD loses access to other networks *See* William P. Rogerson, *Economic Analysis of the Competitive Harms of the Proposed Comcast-NBCU Transaction*, MB Docket No. 10-56, at 12 (June 21, 2010). One implication of this claim is that the loss of a particular cable-affiliated network would increase the return to an MVPD from developing or improving its own programming networks, and thus that an MVPD would likely react to the loss of a cable-affiliated network by investing more in developing or improving its own affiliated programming.

[26] For example, see the discussion of DISH Network's innovations in paragraph 17, above.

to the quality improvements of another is the essence of competition and redounds to the ultimate benefit of consumers.[27]

23. An example of this process in action comes via analogy to a closely related industry: the production of original programming for inclusion on networks.[28] HBO produces in-house content but is not required to (and does not) license it to competing networks, such as Showtime. This arrangement provides HBO with significant incentives to invest in high-quality programming in a way that appears to be pro-competitive; not only has HBO developed its own high-quality, in-house content, but its competitors, including Showtime and others, have also developed high-quality content of their own. As noted in the trade press, "HBO broke ground with series like *The Sopranos* and *Sex and the City*. … Showtime now has the critical and commercial hits to rival HBO and is adding subscribers at a faster clip."[29]

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27 For a discussion of consumer benefits from competitors' responses to the competitive strategies of others (in a merger context), see Steven C. Salop, *Efficiencies in Dynamic Merger Analysis* § III, Statement before the Federal Trade Commission Hearings on Global and Innovation-Based Competition (Nov. 2, 1995), *available at* http://www.ftc.gov/opp/global/saloptst.shtm (last visited Sept. 4, 2012).

28 An example in the MVPD industry is found in competitive reactions to DirecTV's NFL Sunday Ticket. The success of DirecTV's Red Zone channel led to the NFL producing its own version of the channel, the NFL RedZone, which Comcast and other MVPDs licensed and added to their lineups in order to improve their programming offerings. *See* Mike Reynolds, *NFL Net Drop-Kicks Off-Season TV Deals*, Multichannel News, Aug. 22, 2009, *available at* http://www.multichannel.com/article/print/328264-NFL_Net_Drop_Kicks_Off_Season_TV_Deals.php (last visited Sept. 4, 2012). During a conference call with industry analysts, Brian L. Roberts, the Chairman and CEO of Comcast, referred to the need to compete with Sunday Ticket as a motivating factor for picking up NFL RedZone. Transcript, *Sanford C. Bernstein Strategic Decisions Conference* 15 (June 1, 2012), *available at* http://files.shareholder.com/downloads/CMCSA/2018267365x0x573499/55d15a3d-e700-4310-9d7a-c3b06dca532f/CMCSA.20120601.pdf (last visited Sept. 4, 2012).

29 Lauren Strelb and Dorothy Pomerantz, *Show and Sell*, Forbes.com, Aug. 11, 2008, *available at* http://www.forbes.com/forbes/2008/0811/078_print.html (last visited Sept. 4, 2012).

B. VERTICAL INTEGRATION IS OFTEN AN EFFICIENT ARRANGEMENT FOR DEVELOPING AND DISTRIBUTING CONTENT

24. In some cases, incentives to invest in quality programming may be fostered by an arm's-length contract between an MVPD and a non-affiliated network. But in other cases, arm's-length transactions between content providers and unaffiliated MVPDs can be marred by significant contracting inefficiencies. By aligning the incentives of an MVPD and its affiliated content provider, vertical integration may overcome the contractual difficulties that deter relationship-specific investments and thus may yield higher investment than would otherwise occur.[30]

25. Economic theory is clear about why vertical integration may enhance investment incentives under exclusive contracts: Vertical integration may solve the inefficiency that arises in arm's-length exclusive arrangements because writing detailed contracts covering all contingencies is often infeasible.[31] In particular, arm's-length, exclusive distribution contracts may struggle to address a broad range of possible contingencies, some of which may not be foreseeable at the time the contract is written. If the result is incomplete contracts—that is, contracts that do not address fully the contingencies that may arise during the term of the contract—there is an opportunity for one party to act opportunistically and "hold up" the other party. A content provider may be at a particular disadvantage in this respect because, when entering into an exclusive contract with an MVPD, the content provider is committing content—for which it has made sunk investments—to a single

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30 For a survey of economic research on the use of vertical integration as a means to minimize hold-up problems, see Oliver Hart, *Firms, Contracts, and Financial Structure* (Oxford Univ. Press 1995).

31 "In complicated contracts, it is often too difficult to specify all possible contingencies, and a signed contract may contain provisions that turn out to be undesirable to one of the parties." Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization* 400 (4th ed. 2005).

MVPD, exposing the content provider to significant *ex post* hold-up problems. Under these circumstances, (i) the MVPD may be able to appropriate a higher share of the value of the content than the network intended, (ii) the network thus may have trouble recouping the investment that it made in developing or improving content, and hence (iii) the network may be discouraged from undertaking such quality-enhancing investment in the first place.[32]

26. Retaining the ability to use the most efficient distribution channel—including exclusive distribution of content on affiliated MVPDs where appropriate—may be especially important for maintaining efficient incentives for a network to invest in new or substantially upgraded programming. In particular, the decision of a network to invest in new or substantially upgraded programming is very sensitive to the network's expected ability to recoup those investments and, by its very nature, new programming may give rise to a host of unforeseen circumstances that are difficult to handle via arm's-length contracts. Vertically integrated MVPDs may have strong incentives to invest in the development of high-quality content, and these incentives could be lessened substantially if a content provider were required to make the investments on its own or if the vertically integrated MVPD's rivals were guaranteed access to the programming.

27. In sum, the ability to capture profits in the MVPD industry via exclusive distribution of affiliated networks creates incentives to invest in high-quality content, and such incentives may be efficiently enhanced by vertical integration that eliminates the well-

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32 Although I am not privy to the details of negotiations or outcomes, I note that the highly publicized contractual disputes between MVPDs and independent networks (*e.g.,* the recent dispute between Viacom and DirecTV) demonstrate the type of difficulties in arm's-length negotiations that may reduce incentives to undertake large relationship-specific investments, even if those investments would improve product quality. *See, e.g.*, *Analysts See DirecTV as Winner in Viacom Dispute*, Wall St. J., July 20, 2012, *available at* http://blogs.marketwatch.com/thetell/2012/07/20/analysts-see-directv-as-winner-in-viacom-dispute (last visited Sept. 4, 2012).

known contractual inefficiencies in many arm's-length transactions. This does not prove that exclusive distribution of cable-affiliated networks is always welfare enhancing (or that vertical integration is always more efficient than arm's length contracts), but it surely does establish compelling pro-competitive justifications for such arrangements, which should be considered for each specific case.

C. IMPLICATIONS FOR ARGUMENTS BY PROFESSOR KEVIN MURPHY

28. In his declaration in this matter, Professor Kevin Murphy does not consider the full implications of the pro-competitive efficiencies arising from vertical integration when he argues that:[33]

> Evidence shows that the use of exclusives by non-integrated program suppliers is rare, while use of exclusives by cable-affiliated suppliers is more common when it is permitted. Since non-integrated suppliers are free to enter into exclusive arrangements with cable companies or other multichannel video programming distributors ("MVPDs"), economic theory predicts that non-integrated suppliers would use exclusives if they are efficient. The fact that they rarely do suggests that such arrangements rarely are efficient.

In this argument, Professor Murphy attempts to infer from the relative scarcity of *arm's-length exclusive contracts* that all *exclusive distribution* arrangements must be inefficient (and thus presumably used for anti-competitive purposes). Professor Murphy's inference is not valid. As explained above, it is not surprising that arm's-length exclusive contracts may be inefficient due to the contractual limitations that vertical integration overcomes. Cable-affiliated networks may use exclusive in-house distribution, when it is permitted, more often than non-integrated networks use exclusive distribution contracts simply because exclusive in-house distribution is a more efficient option than the exclusive contracts that are available

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[33] Report of Professor Kevin M. Murphy, June 22, 2012 (hereinafter, *Murphy Report*) at 1. Professor Murphy made the same point in a recent *ex parte* presentation to the Commission. (Letter from William Wiltshire to Marlene H. Dortch, August 10, 2012, at 2.)

to non-integrated networks.[34] Hence, the evidence reported by Professor Murphy is consistent with a situation in which the prohibition on exclusive arrangements by vertically integrated networks has prevented the use of exclusive contracts in precisely those cases in which they would be most beneficial.

IV. THE EMPIRICAL MODELS USED BY THE COMMISSION STAFF AND OUTSIDE ECONOMISTS CANNOT ESTABLISH THAT EXCLUSIVE DISTRIBUTION OF CABLE-AFFILIATED NETWORKS IS GENERALLY ANTI-COMPETITIVE AND THUS CANNOT SUPPORT A BLANKET BAN ON SUCH ARRANGEMENTS

29. In the *NPRM*, the Commission describes an empirical analysis it conducted in the *2007 Extension Order* that assesses the profitability to vertically integrated MVPDs of withholding programming from rival MVPDs ("Commission staff model") and notes that the analysis indicated that such a withholding strategy would be profitable in many cases.[35]

[34] In fact, Professor Murphy acknowledges that "[t]he benefits of vertical integration (such as problems with the appropriation of specific investments) can differ from those of exclusivity." *Murphy Report* at 10.

[35] *NPRM* ¶ 42 (citing *Implementation of the Cable Television Consumer Protection and Competition Act of 1992 Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition* and *Review of the Commission's Program Access Rules and Examination of Programming Tying Arrangements*, Report and Order, 22 FCC Rcd. 17791, app. C (2007) (hereinafter, *2007 Extension Order*)).

The model developed in the *2007 Extension Order* is closely related to a model that staff economists at the Commission originally developed as part of the Commission's review of the News Corp.-Hughes (DirecTV) transaction in 2003 and subsequently used in its review of the Comcast-NBCU transaction in 2010. *See General Motors Corporation and Hughes Electronics Corporation, Transferors, and The News Corporation Limited, Transferee, For Authority to Transfer Control*, Memorandum Opinion and Order, 19 FCC Rcd. 473 app. D (2004) (hereinafter, *News Corp.-Hughes Order*); *Comcast Corporation, General Electric Company and NBC Universal, Inc., For Consent to Assign Licenses and Transfer Control of Licensees*, Memorandum Opinion and Order, 26 FCC Rcd. 4238, app. B (2011) (hereinafter, *Comcast-NBCU Order*).

The NPRM "seek[s] comment on this analysis and whether, based on current data, it continues to support retaining an exclusive contract prohibition."[36]

30. The answer to the Commission's question is simple: The Commission staff model can, at most, establish the existence of incentives for vertically integrated MVPDs (and their affiliated networks) to engage in exclusive distribution; it cannot answer the policy-relevant question of whether the ultimate effect of exclusive arrangements is to increase total welfare (*e.g.,* by increasing the quality of the full set of options available to consumers) or to decrease total welfare (*e.g.,* by limiting consumer choice). The Commission staff model is incomplete because it does not consider the dynamics of upstream and downstream competition, including whether and how MVPDs will react to exclusivity arrangements entered into by other MVPDs.

31. Moreover, if anything, the Commission staff model actually supports the need for case-by-case analysis. In particular, even if one accepts the validity of the model, the answers that it produces depend on the values of *many* case-specific parameters. The appropriate values for those parameters are not easily ascertained but rather require case-specific analysis.

32. Finally, implementing the Commission staff model is necessarily complex and subject to error. In many cases, estimates of key parameters cannot practically be made—the data to do so simply *do not exist* in many cases—and so the analysis must proceed based on assumptions about the values of these key parameters, with the outcomes of the model being sensitive to the specific assumptions made. These shortcomings make it difficult to apply the model in any particular instance and can lead to arbitrary policy recommendations.

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36 *NPRM* ¶ 42.

33. The remainder of this section fleshes out each of these points in more detail.

A. THE COMMISSION STAFF MODEL DOES NOT DEMONSTRATE THAT EXCLUSIVE DISTRIBUTION IS ANTI-COMPETITIVE

34. By construction, the Commission staff model addresses only the question of whether exclusive distribution of a given network (particularly by a vertically integrated MVPD) is profitable. It does not answer the policy-relevant question in this proceeding, namely whether decisions by a cable-affiliated network to withhold its content from unaffiliated MVPDs increase or decrease total welfare.

35. Moreover, to the extent that the model shows an exclusive distribution strategy to be profitable, that profitability arises *without denying unaffiliated MVPDs the ability to compete effectively*. In particular, the Commission staff model is designed simply to determine whether a strategy of limited (or exclusive) distribution of content is more profitable than a strategy of distributing that content more broadly, and it does so by balancing the costs of withholding content from certain MVPDs (the revenue foregone by the programming network) against the benefits of such withholding (the revenue gained by the MVPD with exclusive access to the network).[37] The model *does not* purport to

[37] The Commission typically applies the model to investigate whether a vertically integrated network/MVPD has the incentive to withhold content from unaffiliated MVPDs. But the framework can be applied more generally to evaluate the most profitable distribution strategies for programming content, whether vertically integrated with an MVPD or not. In the case of a vertically integrated programming network, the vertically integrated firm retains the incremental downstream revenue. In the case of a non-vertically integrated network, the network may be able to charge unaffiliated MVPDs more for exclusive rights to the programming.

In its typical application to vertically integrated firms, the model defines a "departure rate" as the fraction of a rival MVPD's subscribers who would depart the rival MVPD following the withholding of programming. The model generates a "critical departure rate" as the minimum fraction of the subscribers to a rival MVPD who would have to depart the rival following loss of programming in order for it to be profitable to withhold programming. This critical departure rate is then compared to empirical estimates of the actual departure rate, often based on particular instances where an MVPD lost programming. If the estimated demonstrate that MVPDs without access to particular cable-affiliated programming will exit the market entirely, that their costs will increase, that their ability to obtain other content will be impaired, or, more generally, that their offerings will be weakened in any way other than from the loss of the particular network under consideration.

B. THE CALIBRATION OF THE COMMISSION STAFF MODEL DEPENDS ON CIRCUMSTANCES UNIQUE TO EACH CASE AND THEREFORE REQUIRES CASE-BY-CASE ANALYSIS

36. To the extent that the Commission staff model has any relevance for this proceeding, it actually argues *against* a blanket prohibition on exclusive distribution of cable-affiliated networks. This is true for several reasons, described below.

1. The Commission staff model finds that exclusive distribution is profitable only in a subset of cases.

37. Whether or not the Commission staff model finds that withholding content from certain MVPDs is profitable depends on details of the specific network, MVPD, and market in question. Indeed, in its implementation of the model in both the News Corp.-Hughes transaction and the Comcast-NBCU transaction, the Commission *did not find* that withholding content from unaffiliated MVPDs would always be profitable to a vertically integrated network/MVPD.

- In the News Corp.-Hughes transaction, the Commission found that "a strategy of permanent [regional sports network] foreclosure…would be *unprofitable* for News

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actual departure rate is higher than the critical departure rate, then the model predicts that it would be profitable to withhold content; if the estimated actual departure rate is lower than the critical departure rate, then the model predicts that withholding content would not be profitable.

Corp. and therefore unlikely to be pursued any more frequently post-transaction than it is today."[38] [Emphasis added.]

- Similarly, in the Comcast-NBCU transaction, the Commission found only that "the permanent or temporary withholding of a local broadcast station from an MVPD that competes with Comcast in various geographic markets would be profitable for Comcast *in many markets*."[39] [Emphasis added.]

38. Even the analysis in the Commission's *2007 Extension Order* did not find that withholding content from unaffiliated MVPDs would always be profitable for a vertically integrated network/MVPD. That analysis sought to calculate "the minimum fraction of non-cable subscribers that must shift to cable in order to make withholding [of national programming networks] profitable."[40] The analysis examined "11 popular networks, on the assumption that they were owned by Comcast or by Time Warner," and found that the "minimum fraction" for the 11 networks ranged from as low as 1.9 percent to as high as 63.6 percent.[41] The fact that these values—for 11 popular networks that the Commission assumed were vertically integrated with cable operators—varied so greatly reinforces my conclusion that a blanket prohibition on exclusive distribution of cable-affiliated networks is not justified.

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[38] *News Corp.-Hughes Order* ¶ 152.

[39] *Comcast-NBCU Order* ¶ 44.

[40] *2007 Extension Order*, app. C ¶ 21.

[41] *Id.*

39. Commenters in this proceeding also agree that models of incentives facing programmers indicate that withholding programming is profitable only in some circumstances. For example, Professor Murphy finds that:[42]

> because [withholding] requires a sacrifice of licensing and advertising revenues that its affiliated programmer otherwise could earn by licensing to the MVPD rival, a vertically integrated firm will find it in its interest to withhold the programming from its rival only when the gain from the reduced competitive pressure exceeds the loss of licensing and advertising revenues.

Similarly, in his declaration in this matter, Professor Simon Wilkie notes that:[43]

> the incentive of a vertically integrated MVPD to foreclose a competitor's access to programming depends in part on the size of the market for the programming outside the MVPD's footprint, and crucially on the level of churn induced by removing access to the channel.

2. The parameters underlying the Commission staff model must be evaluated on a case-by-case basis.

40. The calibration of the Commission staff model depends on circumstances unique to each case and therefore requires case-by-case, and even market-by-market, analysis. Even the most basic version of the model—which weighs the cost to networks of withholding programming from unaffiliated MVPDs (due to lost advertising revenues and lost affiliate fees)[44] against the benefits of withholding content (a function of the percentage of subscribers who would switch to the vertically integrated MVPD and the profitability of those new subscribers)—relies on a large number of parameters that vary across different networks, MVPDs, and markets.

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42 *Murphy Report* at 19.

43 Expert Report of Simon J. Wilkie, Ph.D., ¶ 42 (June 22, 2012).

44 Affiliate fees are the fees that MVPDs pay programming networks in order to carry those networks. In the case of broadcast networks, MVPDs pay retransmission consent fees, which are analogous to affiliate fees.

41. For example, the basic model that the Commission applied in the NewsCorp.-Hughes transaction relied on the following parameters:[45]

- number of subscribers of MVPD(s) that lose access to programming;
- percentage of subscribers who can access the withheld content through other channels (*e.g.*, over the air);
- estimates of the actual departure rates in response to loss of access to programming;
- advertising revenue earned by the programmer;
- profit margins of MVPD(s) with access to programming (which must account for subscriber acquisition costs, the tenure of subscribers, and the discount rate, among other factors);
- the share of downstream profits that accrue to the upstream content provider.

In the NewsCorp.-Hughes transaction, many of these parameters simply could not be quantified precisely and thus required assumptions that could not be verified and were the subject of dispute between the Applicants, commenters, and the Commission.[46] For example, given the lack of reliable data on the percentage of subscribers that would be able to access content through other channels, the Commission simply assumed a value that it deemed to be reasonable. Hence, application of even the most basic versions of the model requires approximations or assumptions that are subject to significant uncertainty.

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45 *News Corp.-Hughes Order* app. D.

46 *Id.*

42. Beyond the basic model, additional factors may affect the profitability of withholding programming, including:[47]

- the timing of distribution contracts between programming networks and MVPDs;
- the footprint of the vertically integrated MVPD (notably, no cable operator has a national footprint, meaning that—although the costs of limited distribution occur nationwide for a national cable network—for any cable MVPD, there are large regions of the country where it can capture no benefits from a withholding strategy);
- the existence of long-term contracts between subscribers and MVPDs;
- the availability of alternative methods of access to programming content, including online video; and
- nonlinear advertising revenues.

The impact of many of these parameters is difficult or impossible to quantify empirically, may depend on assumptions about firm behavior that do not match reality, and has been the subject of dispute in prior proceedings.[48] Hence, quantification of these parameters requires analysis on a case-by-case basis and does not lend itself to general conclusions about the results of the model.

3. The Commission staff model is susceptible to substantial errors.

43. Even on a case-by-case basis, it may be difficult accurately to calibrate the Commission staff model because it relies on so many assumptions that are difficult or impossible to verify. Although all economic models depend on some assumptions and thus

[47] See *Comcast-NBCU Order* app. B for a more detailed description of each of these parameters.

[48] *See News Corp.-Hughes Order* app. D; *Comcast-NBCU Order* app. B.

exhibit some degree of uncertainty, in the case of the Commission staff model, both the sheer number of assumptions and the uncertainty surrounding many of the key parameters are striking and render the model susceptible to substantial errors. This issue can be seen with regard to each of the three main categories of critical assumptions underlying the model: (i) the reaction of rival MVPDs to loss of a network; (ii) the reaction of consumers and the resulting impact on MVPD profits; and (iii) the impact on network profits of restricting distribution to a subset of MVPDs.

44. First, the reaction of rival MVPDs to loss of a network is uncertain and likely to depend on specific circumstances. In the basic Commission staff model, rival MVPDs are assumed to be passive, *i.e.*, they are assumed not to respond at all to the loss of programming.[49] However, as explained above, rival MVPDs may respond to the loss of programming by lowering price and/or improving quality, as they have done in the past when they have reached impasses with programmers and thus been unable to access certain programming. These competitive reactions may benefit many consumers.[50] And critically, the possibility of competitor responses may reduce the likelihood that the vertically integrated network would withhold content from rival MVPDs in the first place.

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49 Variations on the standard model, such as that presented by Professor Murphy, allow rival MVPDs to respond to lack of access to content by lowering prices. *See Murphy Report* § V.A. However, Professor Murphy's model does not allow for other, non-price reactions (*e.g.*, developing new content), and determining the induced change in MVPD prices and the implications for whether exclusivity would remain profitable requires further assumptions that may be difficult to substantiate. (Professor Murphy presented a similar model in the Comcast-NBCU proceeding. For further discussion of the difficulties in implementing his model, see Mark Israel & Michael L. Katz, *Economic Analysis of the Proposed Comcast-NBCU-GE Transaction*, MB Docket No. 10-56 ¶¶ 44-52 (July 20, 2010); Mark Israel & Michael L. Katz, *Responses to the 'Murphy Method' for Calculating Departure Rates for Cable Networks*, MB Docket No. 10-56 (Nov. 10, 2010).)

50 For example, if MVPDs cannot effectively price discriminate, a lower MVPD price may benefit those subscribers who do not have a high willingness to pay for the withheld content.

45. Second, the magnitude of consumer response to loss of programming on their MVPD is also difficult to establish empirically and may depend on unverifiable assumptions. Consumer response may be difficult to quantify along a variety of dimensions:

- The net effect on departure rates and diversion to other MVPDs may be difficult to estimate empirically, especially if the MVPDs losing programming react strategically to the loss of that content. Pro-competitive reactions by competitors to the loss of programming (*e.g.,* lowering price or increasing quality) are likely to decrease the departure rate because some subscribers who might otherwise depart will choose to stay if they are compensated for the loss of programming. And the observed "experiments" that are used to compute actual departure rates may or may not include competitor reactions that are relevant to a particular analysis, and thus may need to be adjusted by some unknown amount. For this and other reasons, estimates of actual departure rates are subject to uncertainty.[51]

- Competitor responses—such as changes in quality—also could change *diversion ratios* (*i.e.*, the fraction of those departing subscribers who choose each MVPD that still has the content in question) in uncertain ways.[52]

- The ability of consumers to respond to loss of programming content by switching MVPDs will be affected by the terms of subscriber contracts. For example,

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[51] Quantification of observed departure rates may also be subject to uncertainty because observed instances in which content is unavailable (i) may not be exactly comparable to the situation being evaluated; (ii) may offer only a limited number of data points and consequently yield imprecise statistical estimates; and (iii) may be subject to other data limitations that further reduce the precision of empirical estimates.

[52] The baseline Commission staff model typically assumes that diversion is proportional to aggregate shares, but other assumptions *(e.g.,* consumers who have chosen options other than cable may continue to avoid cable MVPDs) may be more appropriate. *See, e.g.*, *Comcast-NBCU Order* app. B ¶¶ 13-16.

subscribers may be subject to monetary penalties for breaking long-term contracts. Notably, at any point in time, subscribers will be at different points in the term of their contracts and so their reactions will be heterogeneous. This heterogeneity makes it difficult to quantify the impact of subscriber contracts.

- Of those subscribers who switch MVPDs due to the withholding of programming, the extent to which they switch only video service or also voice and/or Internet service may be very difficult to determine. This question is particularly important because MVPD profits from double- or triple-play bundles are greater than MVPD profits from video alone. Therefore, to the extent that subscribers switch only video subscriptions, the incentives for a withholding strategy are lessened. Notably, the type of subscribers who are likely to switch and the services that they choose to switch are likely to depend critically on the particular MVPDs and networks involved.

- The extent to which subscribers can access withheld content via other channels (*e.g.*, over-the-air or online) and the revenues that the programming network earns from these alternative distribution channels also affect the incentives of the vertically integrated firm to withhold content and can also be difficult to quantify. For example, lacking solid empirical evidence in the Comcast-NBCU transaction, the Commission used the over-the-air rate that it had used in the News Corp.-Hughes transaction seven years earlier, which itself was an assumption not grounded in empirical analysis.[53] The increasing availability of programming content online and

[53] *Comcast-NBCU Order* app. B.

the changing patterns of consumers' consumption further complicate these calculations.[54]

46. Finally, the impact of exclusivity on a network's profitability depends on several factors that may be difficult to quantify.

- For example, it is difficult to quantify the amount of advertising revenue lost by a programming network that is withheld from certain MVPDs. There is no basis to assume that lost advertising revenue is linear in the number of lost viewers. Indeed, empirical evidence indicates that advertising revenue *per subscriber* generally rises as the number of viewers rises and falls as the number of viewers falls.[55] Whether this or other adjustments to an assumption of linear lost advertising revenues should be applied depends on the specific circumstances of the case under consideration. For example, in the Comcast-NBCU transaction, the Commission assumed that lost advertising revenue would be non-linear in the number of lost viewers in the case of permanent withholding of content, but linear in the number of lost viewers in the case of temporary withholding of content.[56]

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54 *See* Salini Ramachandran, *Evidence Grows on TV Cord-Cutting*, Wall St. J., Aug. 7, 2012 ("The most intense debate in television today—whether the lure of Netflix and YouTube is causing viewers to disconnect their cable-TV service—is likely to intensify after new figures showed a slight decline in overall pay-TV subscribers in the second quarter."). Access to popular AMC shows via iTunes was cited by DISH Network as a reason that its dispute with the network was not greatly affecting its subscribership. Daniel Frankel, *Pay TV's Big Breakup, Day 40: Dish Says It's Fine, but AMC Admits It's Hurting*, paidContent, Aug. 9, 2012, *available at* http://paidcontent.org/2012/08/09/pay-tvs-big-breakup-day-40-dish-says-its-fine-but-amc-admits-its-hurting/ (last visited Sept. 4, 2012).

55 *See* Keith Brown & Roberto Cavazos, Why is This Show so Dumb? Advertising Revenue and Program Content of Network Television, 27 Review of Industrial Organization 17-34 (2005).

56 *Comcast-NBCU Order* app. B.

- Reduced viewership could affect alternative revenue streams such as revenue arising from syndication. The impact on syndication will depend on the type of content subject to withholding and therefore must be evaluated on a case-by-case basis.

47. Basing policy decisions on the results of a model that relies on so many unknown variables, which can be measured only very imprecisely with existing data, is perilous. The uncertainty of these various parameter values might not be a major concern if the results of the model were robust to small changes in assumptions. But the conclusions one can draw from the Commission staff model are quite sensitive to small changes in the assumed input values. For example, in the Comcast-NBCU transaction, the Commission determined that the model demonstrated that a strategy of temporarily withholding NBCU content from some MVPDs would be profitable in many markets. However, reasonable changes to certain parameters—such as assumed churn rates and diversion ratios—would easily have reversed this conclusion.[57] Therefore, even within the context of the limited question that the model is designed to address, it is difficult to draw general conclusions about the profitability of exclusive contracts. The conclusions from the model will only be as good as the data used in the model, and where that data is necessarily imprecise (and the model is not robust to small changes), the model cannot serve as a reliable basis for making policy decisions.

V. CONCLUSION

48. Based on the analysis presented in this Declaration, I reach the following main conclusion: *Even if a per se ban on the exclusive distribution of cable-affiliated networks*

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[57] *See* Mark Israel & Michael L. Katz, *Application of the Commission Staff Model to the Proposed Comcast-NBCU Transaction*, MB Docket No. 10-56 ¶¶ 125-131 (Feb. 26, 2010).

was justified at the time Congress adopted it, such a blanket ban is no longer appropriate. In today's highly competitive MVPD environment, a cable-affiliated network's refusal to license its programming to unaffiliated MVPDs may be a useful part of the competitive process, as a cable-affiliated network can develop new and improved programming to improve the offering of its affiliated MVPD, thus benefitting the consumers of that MVPD and likely eliciting similarly pro-consumer competitive reactions from rival MVPDs. In this environment, evaluation of any particular exclusive contract should be based on the merits of the arrangement in question, using the Commission's established procedure for evaluating specific exclusive arrangements. When implementing this procedure, the Commission should take regulatory actions that restrict the choices of market participants *only* in those cases where there is a convincing demonstration that a particular exclusive arrangement clearly reduces total social welfare.

Exhibit 1: Curriculum Vitae of Dr. Mark Israel

Mark Israel **August 2012**
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AREAS OF SPECIALIZATION

- Industrial organization and antitrust economics
- Econometric analyses, particularly involving sophisticated modeling on large datasets
- Economic and econometric analysis of horizontal and vertical mergers, including merger simulation techniques
- Economic and econometric analysis of class certification in price fixing and other matters
- Economic and econometric analysis of damages in antitrust and intellectual property matters

EDUCATION

Ph.D., in Economics, STANFORD UNIVERSITY, June 2001.

M.A., in Economics, UNIVERSITY OF WISCONSIN-MADISON, August 1992.

B.A., in Economics, ILLINOIS WESLEYAN UNIVERSITY, Summa Cum Laude, May 1991.

PROFESSIONAL EXPERIENCE

Compass Lexecon, Chicago, Illinois and Washington, DC. Senior Vice President and Managing Director, Washington, DC Office, November 2010 – Present; Senior Vice President, January 2009 – November 2010; Vice President, January 2008 – December 2008; Economist, January 2006 – December 2007.

Kellogg School of Management, Northwestern University, Evanston, Illinois. Assistant Professor of Management and Strategy, September 2000 – June 2007; Visiting Associate Professor of Management and Strategy, September 2007 – August 2008.

State Farm Insurance, Bloomington, Illinois. Research Administrator, August 1992 – August 1995.

Illinois Wesleyan University, Bloomington, Illinois. Visiting Professor, January 1993 – June 1993.

EXPERT REPORTS & AFFIDAVITS

Expert Report of Mark Israel, "Implications of the Verizon Wireless & SpectrumCo/Cox Commercial Agreements for Backhaul and Wi-Fi Services Competition," WT Docket 12-4, August 1, 2012.

Expert Report of Mark A. Israel, Michael L. Katz, and Allan L. Shampine, "Promoting Interoperability in the 700 MHz Commercial Spectrum," WT Docket 12-69, July 16, 2012.

Affidavits of Dr. Mark A. Israel in Re: Bloomberg L.P. V. Comcast Cable Communications, LLC, MB Docket 11-104, June 21, 2012 (Declaration), June 8, 2012 (Declaration), September 27, 2011 (Supplemental Declaration), July 27, 2011 (Declaration).

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Expert Report of Mark Israel and Michael L. Katz, "Economic Analysis of the Proposed Comcast-NBCU-GE Transaction," Federal Communications Commission, MB Docket 10-56, July 20, 2010.

Expert Report of Mark Israel and Michael L. Katz, "The Comcast/NBCU Transaction and Online Video Distribution," Federal Communications Commission, MB Docket 10-56, May 4, 2010.

Expert Report of Mark Israel and Michael L. Katz, "Application of the Commission Staff Model of Vertical Foreclosure to the Proposed Comcast-NBCU Transaction," Federal Communications Commission, MB Docket 10-56, February 26, 2010.

Expert Report of Robert Willig, Mark Israel, and Bryan Keating, "Competitive Effects of Airline Antitrust Immunity: Response of Robert Willig, Mark Israel, and Bryan Keating" in Docket DOT-OST-2008-0252, January 11, 2010.

Affidavit of Dr. Mark A. Israel on Class Certification in Re: Puerto Rican Cabotage Antitrust Litigation, in the United States District Court for the District of Puerto Rico, MDL Docket No. 3:08-md-1960 (DRD), December 10, 2009.

Expert Report of Robert Willig, Mark Israel, and Bryan Keating, "Competitive Effects of Airline Antitrust Immunity" in Docket DOT-OST-2008-0252, September 8, 2009.

Expert Report and Supplemental Expert Report of Dennis W. Carlton and Mark Israel in Re: Toys "R" Us-Delaware, Inc., and Goeffrey Inc. v. Chase Bank USA N.A. in American

Arbitration Association New York, New York, Commercial Arbitrations No. 13-148-02432-08, February 27, 2009 (Expert Report), March 20, 2009 (Supplemental Expert Report).

Expert Reports of James Levinsohn and Mark Israel in Re: 2006 NPM Adjustment Proceeding pursuant to Master Settlement Agreement, October 6, 2008 (Expert Report), January 16, 2009 (Expert Report), March 10, 2009 (Expert Report).

SELECTED OTHER CONSULTING ENGAGEMENTS DURING THE PAST 5 YEARS

Appearance in Ex Parte Meeting, WT Docket No. 12-4, June 4, 2012, in regard to Comcast/Verizon Wireless Partnership, June 2012.

Economic analysis of issues related to Joint Service Arrangements and related contracts in conjunction with a broadcast television merger, 2010.

Appearance in FCC Workshop of Economists, Ex Parte Meeting, WT Docket No. 11-65, July 15, 2011, in regard to ATT/T-Mobile transaction, July 2011.

Appearance in FCC Workshop of Economists, Ex Parte Meeting, MB Docket 10-56, August 27, 2010, in regard to Comcast/NBC Universal transaction, August 2010.

Econometric analysis of class certification and damages in large, high-technology price fixing case, 2008-2012.

Econometric analysis of air traffic at major US airports, with focus on Philadelphia, 2011.

Assessment of the competitive impact of low-cost-carrier competition in Washington, DC and New York airports, 2011.

Analysis of consumer benefits and lack of competitive harm from two international airline alliances, 2010.

Development of merger simulation model for a vertical merger in the consumer beverages industry, 2009.

Development of econometric model to forecast pharmaceutical expenditures, 2009.

Economic and econometric analysis of competition between airlines and potential competitive effects in private litigation on a major airline merger, 2008.

Development and implementation of a Monte Carlo simulation model to assess risk and return on investments for a large not-for-profit charitable foundation, 2008.

Econometric measurement of the importance of network effects in credit cards in the context of measuring damages to a major credit card issuer in litigation, 2007-2008.

Economic and econometric analysis of competition in textbooks, demonstrating lack of competitive harm from a merger between two textbook publishers, 2007.

Economic and econometric analysis of competition between financial derivatives and exchanges, demonstrating lack of competitive harm from merger of two exchanges, 2006-2007.

Ingram Barge Company, Nashville, TN, 2006-2007. Provided analysis and guidance in development of strategic plan. Developed game theoretical framework to assist in investment and information management decisions.

PUBLISHED ARTICLES

"Proper Treatment of Buyer Power in Merger Review," (with Dennis W. Carlton), *Review of Industrial Organization*, July 2011.

"Response to Gopal Das Varma's Market Definition, Upward Pricing Pressure, and the Role of the Courts: A Response to Carlton and Israel" (with Dennis W. Carlton), *The Antitrust Source*, December 2010.

"Will the New Guidelines Clarify or Obscure Antitrust Policy?" (with Dennis W. Carlton), *The Antitrust Source*, October 2010.

"Should Competition Policy Prohibit Price Discrimination?" (with Dennis W. Carlton), *Global Competition Review*, 2009.

Paper commissioned by National Collegiate Athletic Association (with Jonathan Orszag), *The Empirical Effects of Collegiate Athletics: An Update Based on 2004-2007 Data*, February 2009.

"Services as Experience Goods: An Empirical Examination of Consumer Learning in Automobile Insurance," *The American Economic Review*, December 2005.

"Tenure Dependence in Consumer-Firm Relationships: An Empirical Analysis of Consumer Departures from Automobile Insurance Firms," *The Rand Journal of Economics*, Spring 2005.

"The Impact of Youth Characteristics and Experiences on Transitions Out of Poverty," (with Michael Seeborg), *The Journal of Socio-Economics*, 1998.

"Racial Differences in Adult Labor Force Transition Trends," (with Michael Seeborg), *The Journal of Economics*, 1994.

WORKING PAPERS/RESEARCH IN PROGRESS

"The Economics of Cartel Cases and Use of Experts," with Gustavo Bamberger and Dennis W. Carlton, *forthcoming* in *Manual on Cartel Enforcement*, August 2012.

"Buyer Power in Merger Review," with Dennis W. Carlton and Mary Coleman, *forthcoming* in *Oxford Handbook of International Antitrust Economics*, August 2012.

"Delta-Northwest," with Bryan Keating, Dan Rubinfeld, and Robert Willig, *forthcoming* as Chapter 17 of *The Antitrust Revolution*, August 2012.

"The Evolution of Internet Interconnection from Hierarchy to "Mesh": Implications for Government Regulation," with Stanley M. Besen, *Working Paper*, June 2012.

"Airline Network Effects and Consumer Welfare," with Bryan Keating, Dan Rubinfeld, and Robert Willig, *under review at Review of Network Economics*, April 2012.

GRANTS AND HONORS

Searle Fund for Policy Research Grant, 2004-2006, for "An Empirical Examination of Asymmetric Information in Insurance Markets."

Kellogg School of Management Chairs' Core Course Teaching Award, 2003 & 2005.

Bradley Dissertation Fellowship, Stanford University, 1999-2000.

Stanford University, Outstanding Second Year Paper Prize, 1997.

SELECTED PRESENTATIONS

American Bar Association Section of Antitrust Law, Go Low or Go Home! Monopsony a Problem?, Panelist, March 2012.

Federal Communications Bar Association Transactional Committee CLE Seminar, The FCC's Approach to Analyzing Vertical Mergers, Panelist, October 2011.

The Technology Policy Institute Aspen Forum, Watching the Future: The Economic Implications of Online Video, Panelist, August 2011.

The American Bar Association Forum on Air & Space Law, 2011 Update Conference, Antitrust Issues: What's on the Horizon for the Industry, Panelist, February 2011.

American Bar Association Section of Antitrust Law, Antitrust in the Airline Industry Panelist, September 2010.

Northwestern University/University of Chicago Industrial Organization/Marketing Conference, Discussant, 2005.

National Bureau of Economic Research, Winter Industrial Organization Meetings, Discussant, 2004.

CSIO Toulouse Industrial Organization Conference, Paper Presentation, 2004.

American Risk and Insurance Association Annual Meetings, Paper Presentation, 2004.

International Industrial Organization Conference, Paper Presentation, 2004.

Moderator and Chair, Kellogg School of Management Technology Conference, 2002 & 2004.

SELECTED ACADEMIC SEMINARS

Yale University
University of Arizona
Washington University, St. Louis
University of Pennsylvania
University of Toronto
UCLA
University of Wisconsin-Madison
Massachusetts Institute of Technology
Harvard University
University of Chicago
Columbia University
University of Texas
Carnegie Mellon University
University of California, Irvine
University of California, San Diego

REFEREE FOR ACADEMIC JOURNALS

American Economic Review
The Journal of Industrial Economics
The Rand Journal of Economics
Journal of the European Economic Association
The Review of Economic Studies
The Review of Economics and Statistics
Journal of Risk and Insurance